CHAPTER 4
SECTION 3.1

ULTRASOUND - GENERAL

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Authority: 32 CFR 199.4(a)(1), (b)(2), (b)(3), and (b)(4)

I. PROCEDURE CODE RANGE

Abdomen & Retroperitoneum: 76700 - 76705; 76770 - 76775; 76778
Chest: 76604; 76645
Echocardiography: 93303 - 93304; 93307 - 93308; 93312 - 93317; 93320 - 93321; 93325; 93350
Extremities: 76880
Genitalia: 76870; 76872
Head & Neck: 76506; 76511 - 76513; 76516 - 76519; 76529; 76536
Miscellaneous: 76970; 76975; 76986; 76999. See LIMITATIONS
Pelvis: 76805; 76810; 76815 - 76816; 76818; 76825 - 76828; 76830; 76856 - 76857. See LIMITATIONS.
Spinal canal: 76800
Ultrasonic guidance: 76930 - 76960, 76977
Vascular studies: 93875 - 93981. See LIMITATIONS.

II. DESCRIPTION

An ultrasound diagnostic procedure visualizes deep structures of the body by recording the reflections (echoes) of pulses of ultrasonic waves directed into the tissues.

III. POLICY

Diagnostic ultrasound procedures described in the most current edition of Physicians' Current Procedural Terminology (CPT) may be cost-shared when medically necessary subject to the EXCLUSIONS and LIMITATIONS specified below.

IV. POLICY CONSIDERATIONS

A. CPT 76645 (breast echography) may be presumed to be medically necessary in the following circumstances:

1. When mammography is inconclusive.

2. Evaluation of the densely fibrous breast.

3. Following a positive mammography to distinguish a cyst from a solid lesion.

4. In the evaluation of a discrete breast mass in a young female.

B. CPT 76506 (echoencephalography) for a neonate may be presumed to be medically necessary in the following circumstances:

1. To evaluate the risk for intracranial bleeding.

2. To evaluate the significance of a history of perinatal asphyxia.

3. To evaluate demonstrated significant neurological findings.

4. To evaluate or localize intracranial abnormalities.

5. For post-operative evaluation of neurosurgical procedures.

V. EXCLUSION

An ultrasound diagnostic procedure which is not "medically necessary" (as defined in 32 CFR 199) shall not be cost-shared.

VI. LIMITATIONS

A. Definitions and remarks which describe the scope of a procedure, or group of procedures, in the Physicians' Current Procedural Terminology (CPT) are binding for benefit adjudication unless otherwise excluded or modified by this policy.

B. Vascular studies. See Chapter 1, Section 19.1 (NON-INVASIVE VASCULAR DIAGNOSTIC STUDIES).

C. Pelvis. See also this Section: ULTRASOUND - Maternity.

D. Chest. Diagnostic ultrasound may not be cost-shared when used as a routine screening test for breast disease.

E. Miscellaneous. CPT 76999 shall be allowed only when Level II review finds the procedure to be medically necessary.

F. CPT 93307 and CPT 93325 on the same day. Cost-share shall be allowed only for the procedures that Level II review finds medically necessary.

VII. GLOSSARY

Technology terminology.

A-Mode (Amplitude-Mode). A method of echo signal display in which time is represented along the horizontal axis and echo amplitude is displayed along the vertical axis.

A-Scan. The procedure of scanning while viewing the A-Mode display. Frequently a misnomer for an A-Mode display or record.

Arc Scan. A scanning technique in which the transducer is swept through an arc with its beam directed toward a fixed point.

B-Mode (Brightness-Mode). A method of display on an oscilloscope screen in which the intensity of the echo is represented by modulation of the brightness of the spot and in which the position of the echo, displayed in the x-y plane, is determined from the position of the transducer and the transit time of the acoustic pulse.

B-Scan. A misnomer for a B-Mode scan or image; scanning with B-Mode display.

C-Mode (Constant Range Mode). A method of display of cross-sectional echo data in which the plane imaged is at a constant range from the transducer and is perpendicular to the interrogating beam.

Color flow imaging. A color-enhanced duplex doppler ultrasound procedure which is particularly useful in the evaluation of vascular disease and shunts.

D-Mode. A display method in which only moving targets are displayed through their Doppler frequency shifts. If a scan is made it is referred to as scanned D-Mode imaging.

Doppler Echocariography. Doppler ultrasound used to measure flow velocities, to measure ejection fraction, to calculate pressure drops and to evaluate the status of cardiac valves, including output flow and area of valve opening.

Doppler Ultrasound. Ultrasound in which measurement and visual record are made of the shift in frequency of a continuous ultrasonic wave proportional to the blood-flow velocity in underlying vessels used in diagnosis of extracranial occlusive vascular disease.

Duplex Doppler Ultrasound. A combination of gray-scale and doppler ultrasound which permits simultaneous imaging of anatomic structure and characterization of circulatory physiology from known points within the body.

Echocardiography. Ultrasound when used in diagnosing and assessing heart conditions.

Gray-scale Ultrasound. A B-mode technique in which a television video-scan converter amplifies and processes echoes according to their strength into a visual display ranging from white for the strongest echoes to varying shades of gray.

M-Mode (Motion mode). A method of display in which tissue depth is displayed along one axis and time is displayed along the second axis. M-Mode is used frequently to display echocardiographic data when the changes in range of echoes corresponding to heart wall and valve motion are displayed as a function of time.

Real-time Display. A display for which the image is continuously renewed, keeping pace with changes in the object and in which storage or processing time does not delay appreciably the image presentation.

Reflection Mode Imaging. Also called echo ranging.

Scan. The moving of an acoustic beam to produce an image, for which the transducer and

the display movements are synchronized in space and time.

Search Mode. Optimizing the position and orientation of the scanning unit to visualize structures of interest.

Sector Scan. A system of scanning in which the transducer or transmitted beam is rotated through an angle, the center of rotation being near or behind the surface of the transducer.

Short Axis Scan. A scan parallel to the short axis of the heart obtained from cross-sectional echocardiography with a transducer scanning a plane at right angles to the long axis of the heart (base to apex).

Single Sweep Scan. A scan mode in which only a single pass of the transducer over the tissue is used. May be used when relative motion of tissues could be expected and when this motion would obscure the desired detail.

Spiral C-Mode Scanner. Apparatus to perform scanning in a spiral motion so that, from a selected site on the body surface, scans are made corresponding to sections parallel to the surface at varying depths.

T-M Mode. Synonym for M-Mode.

Two Dimensional Echocardiography. B-Mode imaging of the heart and great arteries.

Ultrasound. Mechanical radiant energy with a frequency greater than 20,000 cycles per second; the visualization of deep structures of the body by recording the reflection of pulses of ultrasonic waves directed into the tissue.

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